

FOREWORD

After long and distinguished careers in the fields of mammalian biology and ecology, two renowned scientists retired in March 1997: Dr Hisashi Abe, former professor of the Faculty of Agriculture at Hokkaido University, and Dr Satoshi Shiraishi, former professor of the Faculty of Agriculture at Kyushu University.

Between them, they have served as presidents of the Mammalogical Society of Japan since 1991. The Mammalogical Society of Japan owes both professors a great debt of gratitude for the considerable efforts that they have made in stimulating the development of, and the activities of, the Society.

Dr Hisashi Abe

Dr Abe obtained his scientific education from Hokkaido University, he continued to do research there and, ultimately, through his teaching and research career there, he has contributed influentially to the education of thousands of younger scientists.

He received his Bachelor of Agriculture degree from Hokkaido University's Laboratory of Applied Zoology in 1956. He then continued with graduate studies on small mammals, also at Hokkaido University, earning his doctorate in Agriculture under Professor Tetsuo Inukai for his studies on the classification and biology of the Japanese Insectivora (Abe 1967, 1968).

Dr Abe was appointed to his first academic position at Hokkaido University's Natural History Museum in 1961, where he worked for eight years. Then, in 1969, he became an associate professor in the Laboratory of Applied Zoology at Hokkaido University, where he was appointed professor in 1992.

Dr Abe was born and grew up until graduating from high school in Tokushima Prefecture in western Japan. In his mountainous home town he developed a fascination for living organisms, and for collecting and preserving specimens, all of which are now held at the Tokushima Prefectural Museum. Such childhood experiences formed the basis for his later research career, during which he has collected over 7,000 specimens of mammals, particularly of insectivores and rodents, which are preserved at the Natural History Museum, Faculty of Agriculture, Hokkaido University.

His main area of interest has been the biogeographical question of why certain species occur in certain places, a question which he has examined from the perspectives of phylogenetic relationships, inter-specific interactions and habitat structure. He first described and discussed the phylogenetic and ecological relationships among Japanese insectivores based on their morphology and their life histories in the 1960s, returning again to the subject for further publication in the 1990s (Abe 1967, 1968, 1996), he analyzed the community structure of insectivores and rodents in Nepal and Japan using an index of

morphological overlap between species (Abe 1982), and he also described, with Dr Shiraishi, a new species of mole, *Nesosaptor uchidai* (Abe *et al.* 1991). He has published numerous papers based on his own collections, but perhaps his popular publication has been "A Pictorial Guide to the Mammals of Japan" (Abe *et al.* 1994), a distinguished book, well illustrated, which provides much new information on Japanese mammals, and which he edited and authored.

In addition to his own research studies, Dr Abe has introduced innumerable students to various aspects of ecology and ecological methodology. He has directed various masters degree students and supervised a number of doctoral dissertations in the fields of applied zoology, ecology and taxonomy.

He has recently carried out molecular phylogenetic studies of insectivores with young co-workers using his specimens, with the latest techniques confirming the conclusions he had reached in his previous studies (*e.g.*, Ohdachi *et al.* 1996, Okamoto and Abe in prep.).

Dr Satoshi Shiraishi

Dr Shiraishi graduated from the Faculty of Agriculture of Kyushu University in 1958. He completed his doctoral degree and was appointed as an assistant researcher at the Faculty of Medical Science of Kurume University. From 1967, he worked at the Forestry Station of the Ministry of Agriculture and Forestry of Japan, but then he returned to the Faculty of Agriculture at Kyushu University as an associate professor in 1974 and was appointed professor there in 1990.

His studies have been very wide-ranging, including the taxonomy of rodents and other small mammals (Okura *et al.* 1984, Ando *et al.* 1990), the morphology and ecology of birds, the ecology and functional morphology of ticks, and the biology of parasites. He has studied the ecology of flying squirrels, *Petaurista leucogenys* (Ando *et al.* 1985), and of more than ten species of mice, particularly the biology of their growth (Lin *et al.* 1993, Yoshinaga *et al.* 1997). Of special significance was his discovery of not just a new species but a new genera of mole, *Nesosaptor uchidai*, on the Senkaku Islands, southern Japan (Abe *et al.* 1991), a discovery as exciting as that of the discovery of the Iriomote cat, *Felis iriomotensis*. Dr Shiraishi also studied the ecology and reproduction of hares, *Lepus brachyurus* (Yamada *et al.* 1990) and the growth of the Japanese weasel, *Mustela itatsi*.

Dr Shiraishi has not only worked as a mammalogist, in the field of ornithology, he studied the Eastern great white egret, *Egretta alba modesta* (Min *et al.* 1984) and the black kite, *Milvus migrans* (Koga *et al.* 1994). His study of egrets was instrumental in their promotion as a specially protected species, while his kite studies were directed towards the reduction of air traffic accidents involving birds.

Furthermore, in the field of parasitology, he studied the reproduction, ecology, functional morphology and physiology of the cattle tick, *Haemaphysalis longicornis* (Kakuda *et al.* 1992), which transports *Taivria sergenti*

(protozoa) and causes taireriosis in calves, and established a control system using microscopic, physiological and histochemical techniques. He first studied *Schistosoma japonicum* at Kurume University, and continued his parasitological studies at Kyushu University, during which he discovered a new species, *Tikusnema javaense*, in a rodent from Indonesia (Hasegawa *et al.* 1992).

He made great efforts to introduce the study of the ecology of Australian animals to Japanese scientists, students and the public, and was honored for his efforts in this area by the Australian government in 1986 by being made the recipient of the fifth Southerncross Prize. He also worked in Indonesia in 1980/81 as a specialist consultant for JICA in the field of rodent pest control.

Dr Shiraishi has contributed greatly in the fields of mammalogy, ornithology and parasitology. He has made considerable contributions to both university and academic societies, including serving as president of the Mammalogical Society of Japan from 1995 to 1996, and has influenced and educated innumerable students with his wide knowledge and gentle personality.

In appreciation of Dr Abe's and Dr Shiraishi's work in the field of mammalogy, and for their tremendous contribution to the society, The Mammalogical Society of Japan decided at its 1996 annual meeting held at Kyushu University to publish a special issue of "Mammal Study" (the continuation of the "Journal of the Mammalogical Society of Japan") commemorating their retirement.

Following this decision, the editorial board of "Mammal Study" requested members to submit memorial papers. The committee also asked two members, Dr T. Saitoh and Dr T. Mori to join the editorial team for this special issue. Six special papers, in addition to four other research papers, were subsequently accepted for publication. The committee deeply appreciates the work of these contributors and the two supporting editors.

The committee and all the members of the Mammalogical Society of Japan express their hearty congratulations to Dr Hisashi Abe and Dr Satoshi Shiraishi on their retirement, and celebrate the importance of their scientific work in the publication of this special issue of "Mammal Study". We hope and trust that Dr Abe and Dr Shiraishi, though retiring from their university positions, will, however, continue in encouraging and guiding the work of younger generations of scientists for many more years to come.

REFERENCES

- Abe, H. 1967. Classification and biology of Japanese Insectivora (Mammalia) I. Studies on variaion and classification. J. Fac. Agr. Hokkaido Univ. 55 : 191–265.
- Abe, H. 1968. Classification and biology of Japanese Insectivora (Mammalia) II. Biological aspects. J. Fac. Agr. Hokkaido Univ. 55 : 429–458.
- Abe, H. 1982. Ecological distribution and faunal structure of small mammals in central Nepal. Mammalia 46 : 477–503.
- Abe, H. 1996. Habitat factors affecting the geographic size variation in Japanese moles. Mammal Study 21 : 71–87.

- Abe, H. N. Ishii, Y. Kaneko, K. Maeda, S. Miura, M. Yoneda. 1994. A Pictorial Guide to the Mammals of Japan. Tokai Univ. Press. (in Japanese)
- Abe, H., S. Shiraishi and S. Arai. 1991. A new mole from Uotsuri-jima, the Ryukyu Islands. J. Mammal. Soc. Japan 15: 47-50.
- Ando, M., S. Shiraishi and T. A. Uchida. 1985. Feeding behaviour of three species of squirrels. Behaviour 95: 76-86.
- Ando, A., S. Shiraishi and T. A. Uchida. 1990. Reexamination on the taxonomic position of two intra-specific taxa in Japanese *Eothenomys*: Evidence from cross breeding experiments (Mammalia: Rodentia). Zool. Sci. 7: 141-145.
- Hasegawa, H., S. Shiraishi and Rochman. 1992. *Tikusnema javaense* n. gen., n. sp. (Nematoda: Acuarioidea) and other nematodes from *Rattus argentiventer* collected in West Java, Indonesia. J. Parasit. 78: 800-804.
- Kakuda, H., T. Mori and S. Shiraishi. 1992. Functional morphology of Gene's organ in *Haemaphysalis longicornis* (Acari: Ixodidae). Exp. Appl. Acar. 16: 63-275.
- Koga, K. and S. Shiraishi. 1994. Parent-offspring relations during the post-fledging dependency period in the Black Kite (*Milvus migrans*) in Japan. J. Raptor Res. 28: 171-177.
- Lin, L.-K., T. Nishino and S. Shiraishi. 1993. Postnatal growth and development of the Formosan wood mouse *Apodemus semotus*. J. Mammal. Soc. Japan 18: 1-18.
- Min, B. Y., K. Honda, R. Tatsukawa and S. Shiraishi. 1984. Biometry of growth and food habits of young of the Eastern great white egret, *Egretta alba modesta*, in Korea. J. Fac. Agr. Kyushu Univ. 39: 23-33.
- Ohdachi, S., R. Masuda, H. Abe, J. Adachi, N. E. Dokuchaev, V. Hasegawa, H., S. Shiraishi and Rochman. 1992. *Tikusnema javaense* n. gen., n. sp. (Nematoda: Acuarioidea) and other nematodes from *Rattus argentiventer* collected in West Java, Indonesia. J. Parasit. 78: 800-804.
- Okura, N., S. Shiraishi and T. A. Uchida. 1984. Karyotypes of the Japanese harvest mouse (*Micromys minutus japonicus*) from Fukuoka and Tsushima Islands. J. Fac. Agr. Kyushu Univ. 28: 177-183.
- Yamada, F., S. Shiraishi, A., Taniguchi and T. A. Uchida. 1990. Growth, development and age determination of the Japanese hare, *Lepus brachyurus brachyurus*. J. Mammal. Soc. Japan 14: 65-77.
- Yoshinaga, Y. and S. Shiraishi. 1997. Growth, development, and reproductive patterns in the Japanese field vole, *Microtus montebelli*. J. Mammal. 78: 830-838.

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